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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Masato Ochiai

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EXAMINER

ENGLAND, DAVID E

ART UNIT

PAPER NUMBER

2143

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	09/507,941		OCHIAI, MASATO	
	Examiner		Art Unit	
	David E. England		2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4, 6, 8 - 10, 12, 13, 15, 17, 19 - 21, 34 and 47 - 49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6, 8 - 10, 12, 13, 15, 17, 19 - 21, 34 and 47 - 49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

02

DETAILED ACTION

1. Claims 1, 2, 4, 6, 8 – 10, 12, 13, 15, 17, 19 – 21, 34 and 47 – 49 are presented for examination.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The limitation of “computer readable medium” is not stated in the specification and therefore could be interpreted as a transmission medium per se. Applicant is asked to view the Interim Guidelines that have been added to the MPEP in order to determine the appropriate actions to take to alleviate the objection.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 34 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
5. The claim subject matter is directed to a computer program that is embodied on a type of medium that does not specifically perform the action. A computer program is merely a set of

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instructions capable of being executed by a computer, the computer program itself is not a process and should be treated as a computer program. The claim needs to actually have a computer device perform the program so that the computer readable medium may realize the computer program's functionality. Applicant is asked to view the Interim Guidelines that have been added to the MPEP in order to determine the appropriate actions to take to alleviate the 101 rejection.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 8 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose or teach how a TTL value is a specific value different from a value which is generally set under the predetermined protocol. The specification does teach the standard setting of TTL. Applicant is asked to explain, while pointing to sections of the specification How one sets a TTL different from what is "generally set under the predetermine protocol" or amend out the added limitation.

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8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1, 2, 4, 6, 9, 10, 12, 13, 15, 17, 20, 21, 34 and 47 – 49 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Independent claims cite “a data length being a specific value indicative of a data length different from actual data length of the received data” or the like. It is unclear as to what specifically the data length in a packet the Applicant is intending to claim in light of the specification for there are several different data lengths which are discussed. Applicant is asked to amend the claims in order to specifically claim which data length is suppose to be claimed.

11. All claims that depend on the above mentioned rejection above are also rejected for their dependency on their independent claims.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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13. Claims 1, 2, 4, 12, 13, 15, 34 and 47 – 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2390 in view of Fujimori et al. (6438607) (hereinafter Fujimori) and what is well known in the art.

14. Referencing claim 1, as closely interpreted by the Examiner, RFC 2390 teaches a network apparatus comprising:

15. a receiving unit adapted to receive data from a network, (e.g., pages 1 – 8);

16. a setting unit adapted to set a destination logic address of the received data as a logic address of said network apparatus in a case where the detected value indicative of a destination physical address of the received data and a physical address of said network apparatus are the same, (e.g., pages 1 – 8);

17. What RFC 2390 does not specifically teach is the data length is a specific value indicative of a data length different from actual data length of the received data; and

18. a detecting unit adapted to detect a value indicative of a data length in a packet header of the data received by said receiving unit, the packet header being provided for a predetermined protocol.

19. Fujimori teaches the data length is a specific value indicative of a data length different from actual data length of the received data, (e.g., col. 4, lines 48 – 61, “*As an additional option, error checking bit(s) may be included within the request packet. These bits may be for detecting and/or correcting errors within the packet through implementation of an error checking code, such as a cyclic redundancy code (CRC). Moreover, **multiple groups of error checking bits may be included within the packet**, with each group dedicated to detecting and/or correcting*”).

errors within a distinct portion of the packet. Thus, for example, the ARP header division may include a first group of dedicated error checking bits for use in detecting and/or correcting errors in the header division's contents, while the ARP data division may include a second group of dedicated error checking bits for use in detecting and/or correcting errors in the data division's contents.”). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Fujimori with RFC 2390 because it is well known that multiple protocols may be utilized in a transmission and furthermore checking errors in different sections of the packet can determine where specifically an error could occur, i.e., knowing that the error is in the packet as opposed to knowing that the error is in the header or the body of the packet.

20. Furthermore, it is well known in the art that transmitted messages are divided into predetermined lengths that are divided by a fixed divisor. According to the calculation, the remainder number is appended onto and sent with the message. When the message is received, the computer recalculates the remainder and compares it to the transmitted remainder. If the numbers do not match, an error is detected. Therefore, if an error is detected the packet is no longer valid and discarded. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to check if the data length is correct or the packets would be in error and the packet would be discarded.

21. Referencing claim 2, as closely interpreted by the Examiner, RFC 2390 and Fujimori teach all that is similar in nature above herein out. RFC 2390 and Fujimori further teaches in a case where the destination logic address of the received data and the logic address of said

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network apparatus differ, (e.g., pages 1 – 8, the destination address is null or zeros which is differ from the actual destination logic address of the network apparatus), the destination physical address of the received data and the physical address of said network apparatus are the same, and the detected value indicative of the data length is the specific value, said setting unit sets the destination logic address of the received data as logic address of said network, (e.g., RFC 2390 pages 1 – 8 & Fujimori col. 4, lines 48 – 61).

22. Referencing claim 4, as closely interpreted by the Examiner, RFC 2390 said physical address is a media access control address, and the logic address is an Internet protocol address, (e.g. pages 1 – 8).

23. Claims 12, 13, 15, 34 and 47 – 49 are rejected for similar reasons as stated above.

24. Claims 6, 9, 10, 17, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2390 and Fujimori in view of Anderson et al. (5850388) (hereinafter Anderson).

25. Referencing claim 6, as closely interpreted by the Examiner, RFC 2390 and Fujimori teach all that is similar in nature above that can be applied herein out. RFC 2390 teaches the use of Inverse ARP, which is part of TCP/IP protocol and could be considered a type of echo request that is utilized to find IP addresses from different devices.

26. Anderson teaches the received data is an ICMP echo message by an ICMP protocol and the value indicates a data length of the ICMP echo message, (e.g. col. 12, lines 22 – 56 & col. 20,

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line 54 – col. 21, line 30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Anderson with the combine teachings of RFC 2390 and Fujimori because using an ICMP echo is not only well known in the computer arts to aid in finding devices on a network. Furthermore, utilizing a data length, sometimes known as a “checksum”, “CRC” or error checking bits, allows the end system to check for errors in the packet if the data length is not to the predetermined length.

27. Claims 9, 10, 17, 20 and 21 are rejected for similar reasons stated above.

28. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2390 and Fujimori in view of Kano et al. (6310858) (hereinafter Kano).

29. As per claim 8, as closely interpreted by the Examiner, RFC 2390 teaches a network apparatus comprising:

30. a receiving unit adapted to receive data from a network, (e.g. pages 1 – 8);

31. a detecting unit adapted to detect a value in a packet header of the data received by said receiving unit, the packet header being provided for a predetermined protocol, (e.g. pages 1 – 8);
and

32. a setting unit adapted to set a destination logic address of the received data as a logic address of said network apparatus in a case where the detected value is a predetermined value and a destination physical address of the received data and a physical address of said network apparatus are the same, (e.g. pages 1 – 8), but does not specifically teach detecting TTL. Kano

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teaches detecting TTL being a specific value different from a value which is generally set under the predetermined protocol, (e.g., col. 4, lines 40 – 65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kano with the combine teachings of RFC 2390 and Fujimori because if the TTL value is not greater than a specific number than the packet will be terminated and returned to the sender indicating that the device is not within the allotted hop count given and the device would have to send out another packet with a higher TTL number in order to reach the destination device.

33. Claim 19 is rejected for similar reasons stated above.

Response to Arguments

34. Applicant's arguments with respect to claims 1, 2, 4, 6, 8 – 10, 12, 13, 15, 17, 19 – 21, 34 and 47 – 49 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

36. a. Saito et al. U.S. Patent No. 5732071 discloses ATM bridge device and ATM bridging scheme for realizing efficient ATM bridge interconnection.

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37. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David E. England
Examiner
Art Unit 2143

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